

In the Specification

Please replace the paragraph beginning at line 3 of page 1 as follows:

G1
This application is related to U.S. Patent Application Serial No. _____, 09/832,585, entitled "System for Non-Invasive Measurement of Glucose in Humans"; U.S. Patent Application Serial No. _____, 09/832,586, entitled "Illumination Device and Method for Spectroscopic Analysis"; and U.S. Patent Application Serial No. _____, 09/832,608, entitled "Optically Similar Reference Samples and Related Methods for Multivariate Calibration Models Used in Optical Spectroscopy", all filed on the same date herewith and assigned to the assignee of the present application. The disclosure of each of these related applications is hereby incorporated by reference.

Please replace the paragraph beginning at line 13 of page 17 as follows:

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The spectroscopic measurement system 100 is particularly suitable for operating in the visible or near-infrared spectral regions to measure or identify a wide variety of analytes such as glucose, urea, ethanol, beta2 microglobulin, different hemoglobin types, hematocrit, other biological analytes and specific or overall tissue properties (for biometric identity applications). Other applications can include age verification, gender verification, disease state determinations, tissue hydration estimation, and sample similarity assurance. For purposes of illustration only, use of the spectrometer system 100 is described in terms of measuring glucose concentration through skin tissue. An example of this application is described in U.S. Patent No. 4,975,581 to Robinson et al., the disclosure of which is hereby incorporated herein by reference. Other exemplary applications include those disclosed in U.S. Patent No. 5,494,032 to Robinson et al; U.S. Patent No. 5,596,992 to Haaland et al., the disclosures of which are incorporated herein by reference. Further applications are disclosed in commonly assigned pending applications including U.S. Patent Application Serial No. _____, 09/832,585, filed on the same day herewith, entitled "System for Noninvasive Measurement of Glucose in Humans"; U.S. Patent Application Serial No. 09/182,340, filed October 29, 1998, entitled "Apparatus and Method for the Determination of the Adequacy of Dialysis by Non-Invasive Near-Infrared Spectroscopy" and U.S. Patent Application Serial No. 09/415,594, filed October 8, 1999, entitled "Apparatus and Method for Identification of Individuals by Near-Infrared Spectrum", the disclosures of which are each incorporated herein by reference.

Please replace the paragraph beginning at line 17 of page 19 as follows:

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Refer now to Figures 4 and 5, which are schematic illustrations of spectrometer systems 130/140 utilizing an external light source 102. Except as described herein, the design, function and use of the spectrometer systems 130/140 are substantially the same as described with reference to the spectrometer system 100 illustrated in Figure 2. The external light source 102 may be located remotely and interfaced with the integrating chamber 104 using imaging optics 132 as shown in Figure 4, and/or non-imaging optics 142 as illustrated in Figure 5. The imaging optics 132 may comprise refractive or reflective optics to aid in collecting and directing the light emitted by the light source 102 into the integrating chamber 104. The non-imaging optics 142 may comprise a light pipe, a fiber bundle or other similar device to transmit the light emitted by the light source 102 into the integrating chamber 104. Some types of non-imaging optical devices 142, such as a light pipe, allow the light emitted by the light source 102 to be scrambled and homogenized. An example of a suitable light pipe is disclosed in commonly assigned U.S. Patent Application Serial No. _____, 09/832,586, filed on the same date herewith, entitled "Illumination Device and Method for Spectroscopic Analysis," the entire disclosure of which is incorporated herein by reference. Such a light pipe both spatially and angularly homogenizes light such that the system is insensitive to variation inherent in the light source which has been shown to negatively impact the predictive capability in spectroscopic analysis of tissue.
